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10/764,515

01/27/2004

Chun-Liang Lee

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09/08/2006

RABIN & BERDO, P.C.

Suite 500

1101 14th Street, N.W.

Washington, DC 20005

EXAMINER

MARTINEZ, DAVID E

ART UNIT

PAPER NUMBER

2181

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/764,515

Applicant(s)

LEE, CHUN-LIANG

Examiner

David E. Martinez

Art Unit

2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regards to claim 1, the term "a status display-enabled connector" in line 1 renders the claim indefinite. It is not clear if the term is referring to a connector having a display or to a display having a connector. In addition, in line 2, the term "to transform a UART interface to an Ethernet port interface" also renders the claim indefinite. The claim reciting hardware, cannot have a physical interface transform in to another type of physical interface. Maybe some signals might be transformed/converted/translated from one format into another format but the physical interfaces themselves cannot do that.

Claim 2 recites the limitation "the captured input pins" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the captured RXC signals" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation " the captured CTS signals " in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation " the captured DSR signals " in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation " the captured output pins " in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation " the captured RTS signals " in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation " the captured DTR signals " in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claims 2-10, due to their dependency from claim 1, they suffer from the same limitations and thus are rejected under the same rationale.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent Application Publication No. 2002/0026532 A1 to Maeda et al. (hereinafter Maeda).

1. With regards to claim 1, Maeda teaches a status display-enabled connector [figs 1-2b, element 10] for a universal asynchronous receiver/transmitter (UART) [fig 2b element 10 including element labeled "UART micon"] to transform a UART interface [fig 2b element 10 including element labeled "UART micon"] to an Ethernet port interface [fig 2b element 10 including element labeled "Ethernet Controller"], comprising:

a capturing unit connected to the UART interface for capturing signals of the UART [fig 2b element 10 including element labeled "Ethernet controller" captures UART signals being sent from bus element 1 through interface element 10a to element labeled "UART micon"];

a driving unit connected to the capturing unit for generating a driving signal according the captured signals [fig 2b element 10 including element labeled "RS232C transceiver" generates driving signals that transmit out of connector element 10b]; and

a display unit connected to the driving unit for displaying UART transmission status according to the driving signal [fig 1 element 10 connected to element 4 is a single pixel binary display that works when the signals of the UART are received thus indicating their working status – paragraphs 58-59].

2. With regards to claim 9, Maeda teaches the status display-enabled connector of claim 1, wherein the driving unit includes at least one metal-oxide-semiconductor field-effect transistor (MOS FET) [fig 8 element 8 is a display/computer element having at least one metal-oxide-semiconductor field-effect transistor (MOS FET)].

3. With regards to claim 10, Maeda teaches the status display-enabled connector of claim 9, wherein the MOS FET is a P MOS FET [fig 8 element 8 is a display/computer element having at least one metal-oxide-semiconductor field-effect transistor (MOS FET) wherein at least one of the MOSFETS is P type].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication No. 2002/0026532 A1 to Maeda et al. (hereinafter Maeda). In view of Serial and Parallel cable schematics and wiring diagrams (hereinafter "SPCSWD").

4. With regards to claim 2, Maeda teaches all of the above limitations including in figure 2b a DB-9 connector element 10b for communicating with the display unit, but Maeda is silent as to ~~the~~ the status display-enabled connector of claim 1, wherein the captured input pins are RXD, CTS and DSR, however, SPXSWD teaches the schematics of a DB-9 connector showing

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captured input signals being connected to the pins of the DB-9 connector which are labeled RXD (pin 2), CTS (pin 8) and DSR (pin 6) for the benefit of enabling two devices, each having a DB-9 connector to communicate with each other [SPCSWD-9 PIN to 9 PIN Serial Cable].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Maeda and SPCSWD to recognize that the DB-9 connector of Maeda teaches the captured input pins being RXD, CTS and DSR for the benefit of enabling two devices, each having a DB-9 connector to communicate with each other.

5. With regards to claim 3, Maeda teaches the status display-enabled connector of claim 2, wherein the captured RXD signals is output to the driving unit through a buffer element [fig 2b, memory element labeled 10i].

6. With regards to claims 4 and 5, Maeda teaches the status display-enabled connector of claim 2, wherein the captured CTS signals and the captured DSR signals are output to the driving unit through an OR gate switch [fig 2b element labeled RS232C is a transceiver circuit having OR gate switches].

7. With regards to claim 6, Maeda is silent as to the status display-enabled connector of claim 1, wherein the captured output pins are RTS and DTR, however, SPCSWD teaches the captured output pins are RTS (SPCSWD, pin 74) and DTR (pin 4) for a DB-9 connector element such as the one used by Maeda in figure 2b element 10b for the for the benefit of enabling two devices, each having a DB-9 connector to communicate with each other [SPCSWD-9 PIN to 9 PIN Serial Cable].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Maeda and SPCSWD to recognize that the DB-9 connector of Maeda teaches the captured output pins being RTS and DTR for the benefit of enabling two devices, each having a DB-9 connector to communicate with each other.

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With regards to claims 7 and 8, Maeda teaches the status display-enabled connector of claim 6, wherein the captured RTS signals and the captured DTR signals are output to the driving unit through an OR gate switch [fig 2b element labeled RS232C is a transceiver circuit having OR gate switches].


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Martinez whose telephone number is (571) 272-4152. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fritz M. Fleming can be reached on 571-272-4145. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DEM



KIM HUYNH
SUPERVISORY PATENT EXAMINER
9/1/05